

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in this application:

1. (Amended herein) A method for producing an exhaust gas purifying catalyst, which comprises the steps of:

preparing a pre-crystallization composition containing elementary components, the elementary components constituting a perovskite-type composite oxide containing a noble metal;

mixing the pre-crystallization composition with a powder of theta-alumina and/or alpha-alumina to prepare a mixture; and

subjecting the mixture to heat treatment;

wherein the perovskite-type composite oxide is represented by the general formula (1) :

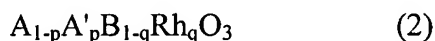


wherein A represents at least one element selected from rare earth elements and alkaline earth metals; B represents at least one element selected from Al and transition elements excluding the rare earth elements and noble metals; N represents at least one noble metal; and m represents an atomic ratio of N satisfying the following relation: $0 < m < 0.5$.

2. (Cancelled)

3. (Amended herein) The method for producing an exhaust gas purifying catalyst according to claim 21, wherein N in the general formula (1) is at least one selected from the group consisting of Rh, Pd, and Pt.

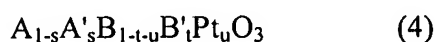
4. (Original) The method for producing an exhaust gas purifying catalyst according to claim 1, wherein the perovskite-type composite oxide represented by the general formula (1) is at least one selected from the group consisting of Rh containing perovskite-type composite oxides represented by the following general formula (2), Pd containing perovskite-type composite oxides represented by the following general formula (3), and Pt containing perovskite-type composite oxides represented by the general formula (4) :



wherein A represents at least one element selected from La, Nd, and Y; A' represents Ce and/or Pr; B represents at least one element selected from Fe, Mn, and Al; p represents an atomic ratio of A' satisfying the following relation $0 \leq p < 0.5$; and q represents an atomic ratio of Rh satisfying the following relation: $0 < q \leq 0.8$,



wherein A represents at least one element selected from La, Nd, and Y; B represents at least one element selected from Fe, Mn and Al; and r represents an atomic ratio of Pd satisfying the following relation: $0 < r < 0.5$,



wherein A represents at least one element selected from La, Nd, and Y; A' represents at least one element selected from Mg, Ca, Sr, Ba, and Ag; B represents at least one element selected from Fe, Mn, and Al; B' represents at least one element selected from Rh and Ru; s represents an atomic ratio of A' satisfying the following relation: $0 < s \leq 0.5$; te represents an atomic ratio of B' satisfying the following relation: $0 \leq t < 0.5$; and u represents an atomic ratio of Pt satisfying the following relation: $0 < u \leq 0.5$.

5. (Original) The method for producing an exhaust gas purifying catalyst according to claim 1, theta-alumina and/or alpha-alumina is represented by the following general formula (5) :

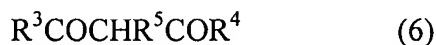


wherein D represents La and/or Ba; and g represents an atomic ratio of D satisfying the following relation: $0 \leq g \leq 0.5$.

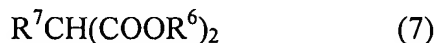
6. (Original) The method for producing an exhaust gas purifying catalyst according to claim 1, further comprising a preparing the pre-crystallization composition by mixing a solution containing alkoxides of elementary components constituting the perovskite-type composite oxide excluding at least one noble metal with a solution containing an organometal salt of at least one noble metal.

7. (Original) The method for producing an exhaust gas purifying catalyst according to claim 6, wherein the organomatal salt of the noble metal is a noble metal complex comprising at

least one of a β -diketone compound or β -ketoester compound represented by the following general formula (6) and/or a β -dicarboxylic ester compound represented by the following general formula (7) :



wherein R^3 represents an alkyl group having 1 to 6 carbon atoms, a fluoroalkyl group having 1 to 6 carbon atoms or an aryl group; R^4 represents an alkyl group having 1 to 6 carbon atoms, a fluoroalkyl group having 1 to 6 carbon atoms, an aryl group or an alkyloxy group having 1 to 4 carbon atoms; and R^5 represents a hydrogen atom or an alkyl group having 1 to 4 carbon atoms,



wherein R^6 represents an alkyl group having 1 to 6 carbon atoms; and R^7 represents a hydrogen atom or an alkyl group having 1 to 4 carbon atoms.

8. (Amended herein) A method for producing a catalyst composition, which comprises the steps of:

preparing a pre-crystallization composition containing elementary components, the elementary components constituting a perovskite-type composite oxide containing a noble metal;
mixing the pre-crystallization composition with a powder of theta-alumina and/or alpha-alumina to prepare a mixture; and
subjecting the mixture to heat treatment;

wherein the perovskite-type composite oxide is represented by the general formula (1) :



wherein A represents at least one element selected from rare earth elements and alkaline earth metals; B represents at least one element selected from Al and transition elements excluding the rare earth elements and noble metals; N represents at least one noble metal; and m represents an atomic ratio of N satisfying the following relation: $0 < m < 0.5$.

9. (New) The method of claim 1, wherein the pre-crystallization composition comprises elementary components of at least one noble metal.

10. (New) The method of claim 1, further comprising mixing elementary components of at least one noble metal with the pre-crystallization composition containing elementary components of other elementary components constituting a perovskite-type composite oxide.

11. (New) The method of claim 1, further comprising mixing elementary components of at least one noble metal into the mixture of pre-crystallization composition and theta-alumina and/or alpha-alumina.

12. (New) A method for producing a catalyst, comprising:
preparing a pre-crystallization composition comprising elementary components of a perovskite-type composite oxide containing a noble metal;
mixing the pre-crystallization composition with a powder of theta-alumina and/or alpha-alumina to prepare a mixture; and

subjecting the mixture comprising elementary components of a perovskite-type composite oxide including elementary components of at least one noble metal, and a powder of theta-alumina and/or alpha-alumina to heat treatment.

13. (New) The method of claim 12, wherein the pre-crystallization composition comprises elementary components of at least one noble metal.

14. (New) The method of claim 12, further comprising mixing elementary components of at least one noble metal with the pre-crystallization composition containing elementary components of other elementary components constituting a perovskite-type composite oxide.

15. (New) The method of claim 12, further comprising mixing elementary components of at least one noble metal into the mixture of pre-crystallization composition and theta-alumina and/or alpha-alumina, before heat treatment.